make_mask_merge

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Abstract

make_mask_merge creates cheese images for individual exposures using the merged source list from merge_source_list. It makes the masks in the three bands of the merged source list: soft, hard, and combined.

1 Instruments/Modes

Instrument	Mode
EPIC	Imaging

2 Use

pipeline processing	no
interactive analysis	yes

3 Description

make_mask_merge creates cheese images for individual exposures using the merged source list from merge_source_list. It makes the masks in the three bands of the merged source list: soft, hard, and combined.

Warning and requirements: make_mask_merge is part of the *esas package* integrated into SAS, but it is limited to work within the *esas* data reduction scheme. This is specially true wrt the structure and names of the input files. In particular, merge_source_list assumes that other tasks from the package, mos-spectra / pn-spectra, cheese-bands, and merge_source_list have been successfully run for the lists to be used.

4 Parameters

This section documents the parameters recognized by this task (if any).

Parameter	Mand	Type	Default	Constraints

srclist	yes	string	merged-source-list.fits	

Merged source list from merge_source_list

prefix	yes	string	1S001	

Exposure identfier.

inmask	yes	string	mos1S001-mask-im-750-1250.fits	

Input mask file name.

flimtot	yes	real		

Combined band source flux threshold (10^{-14} cgs).

flimsoft	yes	real		

Soft band source flux threshold (10^{-14} cgs).

flimhard	yes	real		

Hard band source flux threshold (10^{-14} cgs).

scale	yes	real		

Scale factor for W90 radius.

seper	yes	real		

Minimum allowed source separation in arc second.

maxlikelim	yes	real		

Minimum accepted value for the maximum likelihood detetion parameter.

5 Input Files

merged-source-list.fits

6 Output Files

Cheese masks in three bands for the specified exposure.
mos or pn*prefix*-msl-cheese.fits -- Total band cheese mask.
mos or pn*prefix*-msl-cheese-s.fits -- Soft band cheese mask.
mos or pn*prefix*-msl-cheese-h.fits -- Hard band cheese mask.

7 Algorithm

8 Comments

References